

Mathemat. vol 3.
S O M E

PARTICULARS *K*

Relative to the Discovery of the

L O N G I T U D E;

M E N T I O N I N G

Several Foreign PREMIUMS,

And exactly narrating the Particulars of the
British Acts of Parliament, respecting
that Affair.

With a L I S T of the present

COMMISSIONERS, &c.

L O N D O N :

Printed for GEORGE BURNETT, at Bishop *Burnet's*
Head, near St. *Clement's* Church in the *Strand*; and
Sold by Mr. MILLAN, opposite the *Admiralty*; and
by RICHARDSON and URQUHART, at the *Royal*
Exchange. 1765.

[Price One Shilling.]

RELIGIOUS

Relative to the Discovery of the

LONDON

MENTIONING

Several Foreign Princes

And as the names of the Particulars of the
British Acts of Parliament, respecting
the same.



With a List of

COMMISSIONERS

LONDON

Printed for George Bunnell, at Bell's Court,
near St. Clement's Church in the Strand, and
Sold by Mr. Murray, opposite the Strand, and
by Richardson and Valcourt, at the Swan
Exchange, 1765.

[Three Old Editions]

SOME
PARTICULARS

With respect to the Discovery of the
LONGITUDE.

ABOUT the year 1634, Joa. Baptista Morinus, professor at Paris, applied to cardinal Richlieu, to procure the premium offered for the discovery of the Longitude for him, on account of a method which he proposed to demonstrate. Commissioners were appointed to enquire into the merits of this, with whom he had many disputes, the result of which, amongst other

things, he published 1657, in his *Longitudinum Scientia*: he tells us that Philip III. King of Spain,* was the first who offered a reward for the discovery of the Longitude, and that the estates of Holland soon followed his example, but mentions no farther particulars.

Ricciolus, a cotemporary author, says, that this Philip promised an annual pension of six thousand pistoles † to Ludovic Fonseca, and eight thousand ‡ to Aria Lyola, and that the Hollanders offered fifty thousand guilders to any one who should discover the Longitude.

Varenius, who lived about the same time with the former likewise, in his *Geographia Generalis*, on that head writes to the following effect, *viz.* That this was the problem of which the mariners so earnestly desired a solution from the Mathematicians, which would render Navigation almost perfect, that it had then for two ages exercised

* He came to the throne in 1598, and died about the year 1621.

† About 5500l.

‡ Upwards of 7300l.

and puzzled the wits of many, and for the determination of which, the English, Dutch and French had promised each of them about fifty thousand florins * as a reward.

The Dutch Premium seems first to have been offered during the Stadtholdership of prince Maurice of Nassau,† who was a great Encourager of improvements, especially in Navigation; and the States at that time were rivals to Spain as a maritime power.

In the history of the French academy of sciences, we find, that during the minority of the present Lewis XV.‡ the Prince and States, and in the last place the Duke of Orleans, then Regent, promised a great reward to any one who should determine the Longitude at sea. Also that M. Rouille de Meslay, counsellor of the parliament of Paris, deposited an annual fund, at the disposal of the academy, for any one who should discover something useful in that affair.

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* Not 4500l. each.

† He was elected in the year 1584, and died in 1625.

‡ He was declared of age about the year 1723.

In the year 1696, Edward Harrison, a sea officer, who, as he observes, had, during the war, belonged to ships of six different rates, and seems to have been no mean man in his way, published his *Idea Longitudinis*, wherein he says he had heard, that the Venetians had promised rewards; and the States of Holland had taken it so much into their consideration, that they had offered ten thousand pounds to any one who could make the discovery. Also that Thomas Axe, an Englishman; left a legacy of one thousand pounds to any person that should discover the Longitude, within the space of ten years after his decease, if his wife and child died without issue, within that time. The method was to be approved of by the four Professors of Geometry and Astronomy in Oxford and Cambridge, for the time being, and at least twenty experienced masters of ships, who had made trials thereof in long voyages. Affidavits were to be made before the twelve judges of England, &c.* He died in the

[* Were not these three articles very judicious ?

year 1691, and his family seems to have been extinct soon after, for Mr. Harrison complains that this thousand pounds was irrecoverable, and that there was money wanting towards encouraging the design, to defray the charge of instruments, and perfect the work.

The conditions, as to the limits of exactness, and other particulars with respect to the most of these præmiums, are so little known, that we may venture to say, the act of the British parliament of the twelfth of Queen Ann, was the first and only thing to this day, which has provided the proper requisites for the discovery of the Longitude, and given the Ingenious an opportunity to make a legal demand of their just recompence. Some, not without reason, think that there never was a reward offered by England, before this of Queen Ann; but besides its being specified by Varenus (an edition of whose Geography was published at Cambridge in 1672, by the great Newton, and another, with an Appendix, &c. by Dr. Jurin, in 1712, in neither of these,

nor in the translation, where the original has been corrected and enlarged, has any alteration been made in this article) there seems to have been some such thing in King Charles's time. About the year 1675 the Sieur de St. Pierre, a Frenchman, having proposed a method of finding the Longitude by the moon, a commission was granted to the Lord Viscount Brounker, at that time President of the Royal Society, one of the commissioners of the Navy, and Dr. Seth Ward, Bishop of Sarum, Dr. Pell, Mr. Hook, of Gresham College, Colonel Titus, with Sir Jonas Moor, Sir Ch. Scarborough, Sir Robert Murray, Dr. Christopher Wren, and others, with power to elect such ingenious persons as they thought proper into their number,* by which means Mr. Flamsteed became one of the Quorum. They were to receive these proposals, and to give the King an account of them, with their opinion. Mr. Flamsteed, at that time,

* Ought not the present commissioners, upon whom the task devolves, ex officio, to have and use such a power without that reserve now practised?

acquainted the commissioners that if we had tables of the places of the fix'd stars, and of the moon, both in Longitude and Latitude, true to half a minute, we might find the Longitude, but not by that gentleman's method: upon this, it is said, Mr. Flamsteed was appointed Royal Astronomer, and the observatory at Greenwich built for him. The Royal instructions being to him and his successors expressly, that they should apply themselves with the utmost care and diligence, to rectify the tables of the motions of the Heavens, and the places of the fix'd stars, in order to find out the so much desired Longitude at sea, for the perfecting the art of navigation.

Soon after the above commission to these gentlemen, on account of the *Sieur de St. Pierre*, the five first named, together with *Sir Samuel Morland*, were appointed to examine *Mr. Bond's* method of finding the Longitude by the inclination and declination of the magnetic needle; and though this did not answer that purpose, yet seeing he did foretell, twenty years before it happen-

ed, that at London there would be no variation in the year 1657, and that the table he calculated for London, did not sensibly differ from the truth; by the best observations of those times, nay, while it lasted, the error was little more than a degree; it is not to be wondered at, that it gain'd immense credit amongst the mariners.

The origin of that act, which will no doubt do honour to these kingdoms, deserves to be particularly treated of, and though in so doing, we shall frequently take occasion to mention two names, which by the help of a little wit, have, upon this article, been made ridiculous enough, yet this will give us an opportunity of relating the opinions of some great men, by which the intention of the act itself may be rendered pretty plain.

About the beginning of the year 1713, Mr. Humphry Ditton, and Mr. William Whiston, thinking that signals made at stated times, from hulls of ships, or the like, and proper distances from each other, would answer all the purposes of the Lon-

tude; they by their letter to Sir Richard Steel, of the 11th of July, which he published in his Guardian of the 14th, gave advertisement to the following effect, *viz.* That they had a new method of discovering the Longitude, to communicate to the world, by which, after due consideration, they were well satisfied that it might be determined to greater exactness than the Latitude generally was; that this method was not only practicable at sea as well as land, but easy and intelligible to every one, and with proper charges might be made as universal as the world pleased: that they were ready to disclose it to the world, as soon as they were assured that no other person should be allowed to deprive them of those rewards which the public should think fit to bestow; but that they did not desire actually to receive any such benefit, 'till Sir Isaac Newton himself, with such other persons as should be chosen to assist him, had given their opinion in favour of this discovery.

Notwithstanding all this, to keep up the attention of the public, in that doubting age, they were obliged to write to the same author of the 11th of December following, (who published it in his Englishman of the 10th) to this purpose: That tho' they had met with delays in laying their method before the public, yet after all this time for review and improvement, having communicated it to some excellent judges, they assured the public, that they had not the least grounds for being distrustful of it themselves, as had been reported; that they were better prepared than ever, and willing to make it public, but that their only difficulty was, to have it hearkened to: that they were therefore very unwillingly coming to a resolution of making application elsewhere for encouragement: they therefore begged the lovers of ingenuity, of all nations, to give the best information they could of the several rewards, the conditions, and the method of application for obtaining them.* They likewise affirmed, that their

* Where there any answers given to this ?

method was different from all those justly ridiculed schemes, which they had heard talked of as theirs. To this Letter Sir Richard thought proper to premise these observations, that the modest endeavours of contemplative men, were often neglected by the great; though to such were owing all the arts by which wealth and power were supported; and that the neglect of Collumbus, at the English court, was the cause of the Indian world being in Spanish hands.

Upon the 25th of May 1714, the petition of several captains of her Majesty's ships, merchants of London, and commanders of merchantmen, in behalf of themselves, and all others, concerned in the Navigation of Great Britain, was presented to the House, and read; setting forth, that the discovery of the Longitude was of such consequence to Great Britain, for the safety of the Navy, and merchant ships, as well as improvement of trade, that for want thereof, many ships had been retarded in

their voyages, and many lost; but if due encouragement were proposed by the public for such as shall discover the same, some persons would offer themselves to prove the same, before the most proper judges, in order to there entire satisfaction, for the safety of mens lives, her Majesty's Navy, the encrease of trade, the shipping of these islands, and the lasting honour of the British nation; and praying their petition might be taken into consideration.

Upon which it was ordered, that the said petition be referred to a Committee, and that they do examine the matter thereof, and report the same, with their opinion thereupon, to the House: It was referred to general Stanhope, Sir William Whitlock, Mr. Clyton, Mr. Walpole, Mr. Onslow, Secretary Bromley, the Solicitor General, Vice Chamberlain, and Chancellor of the Exchequer, with all the members that were employed in any office in the Admiralty or Navy, and a number of other noblemen and gentlemen, who were to meet that

afternoon at five o'clock, in the Speaker's chamber, and have power to send for persons, papers, and records,* and to have leave to sit in a morning, if they thought fit. Upon the 11th of June following, the House proceeded to take into consideration the report of the Committee, who were to consider what encouragement was fit to be given to such as should find out the Longitude at sea. And the same was read, and the resolutions of the Committee thereupon, which report and resolution were as follows, *viz.* That Mr. Ditton, and Mr. Whiston, being examined, did inform the Committee, that they had made a discovery of the Longitude; and were very certain, that the same was true in the theory, and did not doubt, but that upon due trial made, it would prove certain and practicable at sea; that they had communicated the whole history of their proceedings, towards the said discovery, to Sir Isaac Newton, Dr.

* Another proof that there had been a reward offered before that mentioned in the ensuing act.

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Clark, Mr. Halley, and Mr. Cotes, who all seemed to allow of the truth of the proposition, as to the theory, but doubted of several difficulties that would arise in the practice.

These gentlemen attended the Committee.

Sir Isaac Newton gave his sentiments as follows, *viz.*

For discovering the Longitude at sea, there have been several projects, true in theory, but difficult to execute.

One is by a watch, to keep time exactly; but by reason of the motion of a ship, the variation of heat and cold, wet and dry, and the difference of gravity in different Latitudes, such a watch hath not yet been made.

Another is by the eclipses of Jupiter's Satellites, but by reason of the length of telescopes requisite to observe them, and the motion of a ship at sea, those eclipses cannot yet be there observed.

A third is, by the place of the moon, but her theory is not yet exact enough for

that purpose ; it is exact enough to determine the Longitude within two or three degrees, but not within a degree.

A fourth is, Mr. Ditton's project, and this is rather for keeping an account of the Longitude at sea, than for finding it, if at any time it should be lost, as it may easily be in cloudy weather.

How far this is practicable at sea, and with what charge, they that are skill'd in sea affairs are best able to judge.—In sailing by this method, when ever they are to pass deep seas, they must sail due East or West, they must first sail into the Latitude of the next place to which they are going beyond it, and then keep due East or West, 'till they come at that place.

In the three first ways, there must be a watch, regulated by a spring, and rectified every visible sun rise, and sun set, to tell the hours of the day or night. In the fourth way, such a watch is not necessary. In the first way there must be two watches, this and the other above mentioned. In any of the

first three ways, it may be of some service to find the Longitude within a degree, and of much more service to find it within 40 minutes, or half a degree if it may, and the success may deserve rewards accordingly.

In the fourth way, it is easier to enable seamen to know their distance, and bearing from the shore 40, 60, or 80 miles off, than to cross the seas; and some part of the reward may be given when the first is performed on the coast of Great Britain, for the safety of ships coming home; and the rest when seamen shall sail to an assigned distant harbour without losing their Longitude, if it may be.*

Dr. Clark said, that there could no discredit arise to the Government, in promising a reward in general, without respect to any particular project, to such person or persons as shall discover the Longitude at sea.

Mr. Halley observed, that Mr. Ditton's method for finding the Longitude, did

* Well advised !

seem to him to consist of many particulars, which first ought to be experimented, before he could give his opinion, and that it would cost a considerable sum to make the experiments, but what the expence would amount to, he could not tell.

Mr. Whiston affirmed, that the undoubted benefit which would arise on the land, and near the shore, would vastly surmount the charges of experiments.

Mr. Cotes said, that the project was right in the theory near the shore, and the practical part ought to be experimented.

Upon the whole matter, the Committee came to these resolutions, *viz.* That a reward be settled by Parliament, upon such persons as shall discover a more certain and practical method of ascertaining the Longitude than any yet in practice, and the said reward be proportioned to the degree of exactness to which the said method shall reach, and that it is the opinion of the Committee, that the House be moved, that leave be given for a bill to be brought in accordingly.

This was agreed to by the House, *nemine contradicente*, and leave was given to Sir William Whitlock, Sir George Beaumont, Sir Thomas Hardy, Sir John Leak, General Stanhope, Mr. Addifon, Mr. Clyton, and Mr. Aislaby, to prepare and bring in the bill.

In consequence of this was produced,

An act for providing a public reward for such person or persons as should discover the Longitude at sea.

The preamble recites, that it is well known to all that are acquainted with the art of Navigation, that nothing is so much wanted and desired at sea, as the discovery of the Longitude, for the safety and quickness of voyages, the preservation of ships, and the lives of men. And whereas, in the judgment of able Mathematicians and Navigators, several methods have already been discovered, true in theory, tho' very difficult in practice, some of which (there was reason to expect) might be capable of improvement, some already discovered might be proposed to the public, and others might

be invented hereafter ; and as such a discovery would be of particular advantage to the trade of Great Britain, and very much for the honour of the kingdom ; but that beside the difficulty of the thing itself, partly for want of some public reward to be settled as an encouragement for so useful and beneficial a work, and partly for want of money for trials and experiments necessary thereunto, no such inventions or proposals, hitherto made, had been brought to perfection.

The act then appoints (with the usual advice and consent, and by the usual authority) the Lord High Admiral of Great Britain*, or the first commissioner of the admiralty, the Speaker of the Honourable House of Commons, the first Commissioner of Trade, the Admirals of the Red, White, and Blue Squadrons, the Master of the Trinity House, the President of the Royal Society, the Royal Astronomer of Green-

* This office is generally supposed to include all the Lords of the Admiralty.

wich, the Savilian, Lucasian, and Plumian Professors of the Mathematics in Oxford and Cambridge, all for the time being; with several other Lords Spiritual and Temporal, and some gentlemen of abilities and learning (who had been active in procuring the act) and they were constituted commissioners for the discovery of the Longitude at sea, and for examining, trying, and judging of all proposals, experiments, and improvements, relating to the same; and that the said commissioners, or any five or more of them, should have full power to hear and receive any proposal or proposals that should be made to them for discovering the said Longitude; and in case the said commissioners, or any five or more of them, should be so far satisfied of the probability of any such discovery, as to think it proper to make experiment thereof, they should certify the same under their hands and seals, to the commissioners of the navy for the time being; together with the persons names who were the authors of such proposals; and upon producing such

certificate, the said commissioners were authorized and required to make out a bill or bills for any such sum or sums of money, not exceeding two thousand pounds §, as the said commissioners for the discovery of the Longitude, or any five or more of them, should think necessary for making the experiments, payable by the treasurer of the navy; which sum or sums the treasurer of the navy was thereby required to pay immediately, to such person or persons as should be appointed by the commissioners for the discovery of the said Longitude, to make those experiments out of any money that should be in his hands, unapplied for the use of the navy.

The act further ordained, that after experiments made of any proposal, or proposals, for the discovery of the said Longitude, the commissioners appointed by the said act, or the major part of them, should declare and determine how far the

§ Cannot the Commissioners, while in power, repeat this sum as often as they think proper?

same was found practicable, and to what degree of exactness.

And for a due and sufficient encouragement to any such person or persons, as should discover a proper method for finding the said Longitude, it was enacted, That the first author or authors, discoverer or discoverers of any such method, his or their executors, administrators, or assigns, should be entitled to, and have such reward as thereafter was mentioned; *viz.* to a reward or sum of 10,000*l.* if it determined the longitude to one degree of a great circle, or 60 geographical miles; to 15,000*l.* if it determined the same to two-thirds of that distance; and to 20,000*l.* if it determined the same to one-half of the same distance; and that one moiety or half-part of such reward or sum should be due and paid, when the said commissioners, or the major part of them, did agree that any such method extended to the security of ships within 80 geographical miles of the shores †, which are places of the greatest

† Compare this with Mr. Ditton and Whiston's Scheme,

danger, and the other moiety or half-part, when a ship by the appointment of the said commissioners, or the major part of them, should thereby actually sail over the ocean, from Great Britain to any port in the West-Indies ‡, as those commissioners, or the major part of them, should chuse or nominate for the experiment, without losing their Longitude beyond the limits before mentioned.

It was also enacted, That as soon as such method for the discovery of the Longitude should be tried and found practicable and useful at sea, within any of the degrees aforesaid, that the said Commissioners, or the major part of them, should certify the same accordingly, under their hands and seals, to the commissioners of the navy for the time being, together with the person or persons names who were the authors of such proposal ; and upon such certificate the said commissioners were thereby authorized and required, to make out a bill or bills

‡ See Sir Isaac's Sentiments, formerly mentioned. At that time these seem to have been our longest voyages.

for the respective sum or sums of money, to which the author or authors of such proposal, their executors, administrators, or assigns, should be intitled by virtue of the Act; which sum or sums the Treasurer of the Navy was thereby required to pay to the said author or authors, their executors, administrators, or assigns, out of any money that should be in his hands unapplied, to the use of the Navy, according to the true intent and meaning of the Act.

And it was thereby farther enacted, That if any such proposal should not, upon trial, be found of so great use, as aforementioned; yet if the same, on trial, in the judgment of the said Commissioners, or the major part of them, was found of considerable use to the then public, that in such case, the said author or authors, their executors, administrators, or assigns, should have and receive such less reward therefore, as the said Commissioners, or the major part of them should think reasonable, to be paid by the Treasurer of the Navy, on such certificate as aforesaid.

Q. I. Have not the Commissioners, by the last clause, a power of giving any sum less than ten thousand pounds for what they shall find to be an useful discovery, and may they not repeat the same?

Q. II. As soon as the Commissioners have ordered the sum of ten, fifteen, or twenty thousand pounds, for the discovery of the Longitude within the respective limits, is their commission directly at an end, or can they do any thing further without a new Act?

In the 14th of George II. was passed an Act for surveying the chief ports and headlands on the coasts of Great Britain and Ireland, and the Islands and Plantations thereto belonging, in order to the more exact Determination of the Longitude and Latitude thereof.

In the preamble the former Act is recited, and the absolute necessity of making the survey above specified, in order to make the discovery of the Longitude useful at sea, and for the security of ships approaching

near the shores, and as some doubts had arisen, whether by the words of the said Act of the 12th of Queen Anne, the sum of 2000l. appointed for making experiments, or any part thereof, could be applied for such survey. It was therefore enacted, That the Commissioners for discovering the Longitude, should have full power to apply such part of the sum of 2000l. mentioned in the said Act, which had not already been laid out in experiments, as they should think necessary for the making such survey; and that such sum or sums, part of the said 2000l. which the said Commissioners thought necessary, should be paid immediately by the Treasurer of the Navy, to such person or persons as should be appointed by the said Commissioners, to make such survey, out of the money that should be in the hands of such Treasurer, unapplied for the use of the Navy.

In the 26th of George II. was passed, an Act to render more effectually an Act, made in the 12th year of the reign of her late

Majesty Queen Anne, intituled an Act for providing a public reward for such person or persons, as shall discover the Longitude at sea, with regard to the making experiments of proposals made for the discovering the Longitude; and to enlarge the number of Commissioners.

In the preamble part of the former Acts are recited; also that the Commissioners had received several proposals, made to them at different times, for the discovering the Longitude, and were so far satisfied of the probabilities of such discoveries, that they thought it proper to make experiments thereof, and accordingly, certified the same from time to time to the Commissioners of the Navy for the time being; together with the name of Mr. John Harrison, who was the Author of the said proposals; whereupon bills were made out for several sums of money, amounting in the whole to 1250l. all which respective sums were paid to the said John Harrison, by the Commissioners of the Navy, pursuant to the

Directions of the said act, as part of the 2000*l.* therein mentioned, which the said Commissioners thought necessary for making the experiments.

And whereas the said Commissioners did, by virtue of the power vested in them by the said several Acts of Parliament, appoint Mr. William Whiston, to survey and determine the Longitude and Latitude of the chief Ports, and head Lands on the coasts of Great Britain and Ireland, &c. and did also apply the farther sum of 500*l.* (other part of the said sum of 2000*l.*) which they thought necessary for making such survey; which sum of 500*l.* was paid to the said William Whiston accordingly, by the Treasurer of the Navy; and that by reason of the above several payments, there remained only 250*l.* in the power of the Commissioners, by the said Acts of Parliament, towards making any farther Experiments, which they might think necessary.

And whereas, from the experiments which had already been made, in pursuance of the powers vested in the said Com-

missioners as aforesaid ; there is great reason to expect, that by continuing to encourage ingenious persons to invent and make further improvements and experiments, in order to discover the said Longitude, such discoveries may at length be produced, as will effectually answer that end, and thereby contribute very much to the advantage of the trade and honour of the kingdom.

Therefore it was enacted, that the said Commissioners should have power to receive proposals, &c. (as in the act 12 Anne) and to direct the payment of the further sum of 2000l. over and above the 250l. to the person or persons making such experiments.

And as many of the Commissioners appointed by the act of the 12th of Queen Ann were deceased, the act appointed the Governor of the Royal Hospital for seamen at Greenwich, the Judge of the High Court of Admiralty, the Secretaries of the Treasury, the Secretary of the Admiralty, and the Comptroller of the Navy, all for the time being, together with such persons as

had been appointed by the Act of Queen Anne, and were surviving, to be Commissioners for the discovery of the Longitude.

In the second year of George III. was obtained,

An Act for rendering more effectual the Act of the 12th of Queen Anne, with regard to the making experiments of proposals made for discovering the Longitude.

In this the former Acts were recited, and as the Commissioners had, at different times, certified the proposals made to them, to the Commissioners of the Navy, whereupon bills had been made out, amounting in the whole to the sum of 4000l. all which had been paid pursuant to the directions of the Parliament: the farther sum of 2000l. was then granted, for the like purposes of making experiments, &c.

In the 3d year of George III. was granted,

An Act for the encouragement of John Harrison, to publish and make known his

invention of a Machine or Watch, for the discovery of the Longitude at sea.

In the preamble is recited the several Acts as abovementioned : as also, that the utility of the invention of the said John Harrison, had been proved in a late voyage to Jamaica; and that the Commissioners, at their meeting, on the 17th of August last, did adjudge, that by the tryal made of the said Instrument, it was found of considerable use to the public, and did thereupon make out an order for the payment of 2500l. to the said John Harrison, in manner therein mentioned, *viz.* 1500l. part thereof immediately, and the remaining 1000l. when he, or any person employed by him, should return from making a farther tryal in the West-Indies; but it was to be understood, that the said sum of 2500l. should be esteemed as part of either of the Rewards granted by Act of Parliament, for the discovery of the Longitude; and as the said J. Harrison had received the said sum of 1500l. and had represented to the

Commissioners, that he would not, by any means, decline any farther trial of the Instrument or Watch which he had invented, before the principles thereof should be made public; but that his advanced age, the weakness of his sight, and the danger of the voyage to the health and life of his son, upon whom alone the success of the said invention would depend, might risk the loss of so useful a discovery, not only to the disadvantage of the said J. Harrison, but also to the very great detriment of mankind: and as the Commissioners of Longitude, having received the said representation, did, at their meeting, on the 21st of February last, unanimously agree to recommend to the said John Harrison, to make an application to Parliament, in order that his said Invention might be made known to the Public, upon such terms, and in such manner, as to the Parliament should seem meet; therefore it was enacted, that so soon as the said John Harrison, his executors, or administrators, should make or cause to be made, a full and clear discovery

of the principles of his said instrument or Watch, for the discovery of the Longitude, and of the true manner and method in which the same is and may be constructed, unto the Right Honourable Lord Charles Cavendish, the Right Hon. the Earl of Morton, the Right Hon. Lord Willoughby, of Parham, George Lewis Scot, Esq; Fellow of the Royal Society, Mr. James Short, F. R. S. Mr. John Mitchell, Woodwardian Professor at Cambridge, Mr. Alexander Cumming, Mr. Mudge of Fleet-street, Mr. William Fordsham, Mr. Andrew Dickie, and Mr. James Green, of Fenchurch-street, who, as well as the said J. Harrison, were required to publish and make the same known, so that other workmen might be enabled to make other such Instruments or Watches for the same purpose, and as soon as the abovementioned Noblemen and Gentlemen, or the major part of them, should certify under their hands and seals, to the Commissioners of his Majesty's Navy for the time being, that the said J. Harrison had fully and clearly made the said discovery for the purposes

aforesaid then, upon producing such certificate, the Commissioners of the Navy were authorised to make out a bill or bills, for the sum of 5000l. payable to the said J. Harrifon, in the manner formerly directed.

It was further enacted, That as soon as it should appear by future trial or trials, that the said instrument was a proper method for finding the Longitude within any of the limits prescribed by the Act of Queen Anne, the Commissioners were authorised to make out bills for the sum or sums to which he should be intitled; and that the same should be paid down as formerly directed, first deducting thereout this sum of 5000l. and the beforementioned sum of 1500l. † already received by the said J. Harrifon.

It is also enacted, That no person or persons, other than the said J. Harrifon, his executors, administrators, or assigns, shall have, or be intitled to any reward granted by the Act of Queen Anne, by means or on account of any instrument or instruments

† It is now 2500l.

for keeping Time, untill the merits of the said Instrument or Watch, invented by the said J. Harrison, shall be ascertained; provided the ascertainment thereof shall be made within four years next after passing of this Act.

Thus far the Acts.

By some unaccountable difference betwixt the Commissioners, last appointed by Parliament, and Mr. Harrison, the discovery abovementioned has not been made, it is therefore a question whether this last Act is not null and void.

Q. I. Should Mr. Harrison's said Instrument or Watch, upon the late trial to Barbadoes, be found to come within the limits mentioned in the Act of Queen Anne, and to satisfy the first appointed Commissioners as to its regularity, by such experiments as they shall judge expedient; does it lie with them to call upon the Commissioners, last appointed by Parliament, or such other Mathematicians and Mechanics, who may, by themselves, or in the presence of and with the said first appointed Commissioners, receive and examine the prin-

ciples of the said Instrument or Watch, as directed by Parliament?

Q. II. As the 2000l. last granted by Parliament is expended, will it be of consequence to do any material business without a new Act?



F I N I S

A LIST of the present COMMISSIONERS:

EARL of Egmont
—— Hillsborough

—— Sandwich

—— Morton

Viscount Barrington

Sir John Cust, Bart.

Mr. Maskylen, Royal Astronomer

Professsor Hornsby, Oxford

—— Waring, }
—— Shepherd, } Cambridge

Admiral, Sir William Rowley

—— Henry Osborn

—— Thomas Griffin

—— Sir Edward Hawke

—— Charles Knowles

—— Hon. John Forbes

—— Sir George Pocock

—— Isaac Townshend

Sir Thomas Salisbury

Charles Jenkinson, Esq;

Thomas Whately, Esq;

Philip Stephens, Esq;

George Cockburn, Esq;

A List of the British Commissioners

ART. of Honour
His Majesty's

Secretary

Mr. [Name]

Mr. [Name]

Mr. [Name]

Mr. [Name]

Mr. [Name]

Mr. [Name]

Mr. [Name]



Mr. [Name]

Mr. [Name]

Mr. [Name]

Mr. [Name]

Mr. [Name]

Mr. [Name]

Mr. [Name]

Mr. [Name]

Mr. [Name]

Mr. [Name]

